



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 10**  
**OREGON OPERATIONS OFFICE**  
805 SW Broadway, Suite 500  
Portland, Oregon 97205

June 13, 2008

Mr. Jim McKenna  
Port of Portland & Co-Chairman, Lower Willamette Group  
121 NW Everett  
Portland, Oregon 97209

Mr. Robert Wyatt  
Northwest Natural & Co-Chairman, Lower Willamette Group  
220 Northwest Second Avenue  
Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240.  
Toxicity Reference Values Methodology – Aquatic Biota Tissue

Dear Messrs. Wyatt and McKenna:

On April 11, 2008 EPA provided the recommended Toxicity Reference Values (TRVs) for the water, sediment and dietary assessment of fish and wildlife to be used in the Portland Harbor baseline ecological risk assessment (BERA). In that letter EPA advised the LWG that tissue-residue TRVs were still under development. EPA has also advised LWG that without a compendium of baseline ecological risk assessment aquatic biota tissue TRVs from which tissue TRVs for the Portland Harbor BERA can be selected, a TRV derivation methodology or hierarchy will have to be defined. The purpose of this letter is to provide EPA's methodology for derivation of aquatic biota tissue TRVs.

EPA has identified two primary approaches using the existing scientific literature to derive baseline ecological risk assessment aquatic biota tissue TRVs as the most appropriate for aquatic biota tissue TRV derivation at Portland Harbor. The two baseline tissue TRV derivation approaches EPA is recommending are the Species Sensitivity Distribution (SSD) approach and the Lowest Value approach. The attached methodology describes the approaches, presents a hierarchy of procedures to be used to develop TRVs, including selection of the specific approach to be used depending on data availability, and a list of chemicals for which aquatic biota tissue TRVs need to be derived.

The list of chemicals for which tissue TRVs need to be derived for the BERA is based on the tissue sample results available through the completion of the Round 2 data report. We anticipate that TRVs for few, if any additional chemicals will be required after tissue data collected as part of the Round 3 sampling events are screened.

EPA's desired outcome from the aquatic biota tissue TRV derivation process is to develop TRVs that are based on measured tissue residues from various aquatic species that are associated with adverse ecological effects or unacceptable ecological risks to the assessment endpoints for various categories of ecological receptors at Portland Harbor. EPA is currently using the attached methodology to derive tissue TRVs using the residue-effects information EPA and LWG have previously shared with each other. We will provide you with the numerical values of the TRVs and the data that were used to derive the TRVs as soon as the TRV derivation is complete.

If you have any questions, please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

Chip Humphrey  
Eric Blischke  
Remedial Project Managers

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